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SEARCH REQUEST FORM

Examiner # (Mandatory): 73476 Requester's Full Name: MICHAEL DAVIS

Art Unit 1646 Location (Bldg/Room#): CM1/10E13 Phone (circle) 305 306 308) 7038

Serial Number: 09/163,713 Results Format Preferred (circle): PAPER DISK E-MAIL

Title of Invention _____

Inventors (please provide full names): _____

Earliest Priority Date: _____

Keywords (include any known synonyms registry numbers, explanation of initialisms):

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Search Topic:
Please write detailed statement of the search topic, and the concept of the invention. Describe as specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. You may include a copy of the abstract and the broadcast or most relevant claim(s).

claims attached

Plase search Claims 6, 12, 14 sequence $L_1X, V_2L_2L_3$

Search SEQ ID NO: 1 – 17

In Teqsence & commercial database

Thanks

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Point of Contact:
Alex Waclawiw
Technical Info. Specialist
CM1 12C14 Tel: 308-4491

STAFF USE ONLY

Searcher: _____
Searcher Phone #: _____
Searcher Location: _____
Date Picked Up: 1-6-00
Date Completed: 1-6-00
Clerical Prep Time: 20
Terminal Time: 62
Number of Databases: _____

Type of Search

_____	N.A. Sequence
18 x	A.A. Sequence
_____	Structure (#)
_____	Bibliographic
Mode 15	Litigation1
_____	Fulltext
_____	Procurement
_____	Other

Vendors (include cost where applicable)

x	STN
_____	Questel/Orbit
_____	Lexis/Nexis
_____	WWW/Internet
_____	In-house sequence systems (list)
_____	Dialog
_____	Dr. Link
_____	Westlaw
x	Other (specify) mus pcon

prep 3 3 4
1 5 20
4
30
18
57
3
2
62

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seq. search -STN

Pak 09/163,713

=> d his

(FILE 'REGISTRY' ENTERED AT 09:38:12 ON 06 JAN 2000)
DEL HIS Y
ACT PAK/A

L1 (341696)SEA FILE=REGISTRY ABB=ON [IMLVFWY]..[IMLVFWY][IMLVFWY]/SQSP
L2 36490 SEA FILE=REGISTRY ABB=ON L1 AND SQL<15

L3 25666 S L2 AND SQL<11 Claim 6, 12, 14 sequence.
ACT PAK2/A

L4 (183)SEA FILE=REGISTRY ABB=ON
KLVQLLTTT|ILHRLLQE|LLRYLLDK|LLRYLLD|L
L5 (25)SEA FILE=REGISTRY ABB=ON
QLLRYLLDKD|HQLLRYLLDKD|PQAQQKSLLQQLLT
L6 193 SEA FILE=REGISTRY ABB=ON L4 OR L5 — seq's 1-17

FILE 'HCAPLUS' ENTERED AT 09:40:48 ON 06 JAN 2000
L7 26806 S L3
L8 152 S L6
L9 699 S NUCLEAR (L) HORMONE (L) RECEPTOR#
L10 5 S L7 AND L9
L11 10 S L8 AND L9
SELECT RN HIT L10 1-5
SELECT RN HIT L11 1-10

FILE 'REGISTRY' ENTERED AT 09:46:07 ON 06 JAN 2000
L12 22 S E64-85
L13 22 S L12 AND L3
L14 34 S E86-119
L15 34 S L14 AND L6
L16 19 S L15 NOT L13

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=> fil reg

FILE 'REGISTRY' ENTERED AT 09:47:42 ON 06 JAN 2000
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STRUCTURE FILE UPDATES:    4 JAN 2000  HIGHEST RN 252213-30-2
DICTIONARY FILE UPDATES:   4 JAN 2000  HIGHEST RN 252213-30-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 13, 1999

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=> d his l1-l3;d que l6

     (FILE 'REGISTRY' ENTERED AT 09:38:12 ON 06 JAN 2000)
               DEL HIS Y
               ACT PAK/A
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L1   (    341696)SEA FILE=REGISTRY ABB=ON  [IMLVFWY]..[IMLVFWY][IMLVFWY]/SQSP
L2         36490 SEA FILE=REGISTRY ABB=ON  L1 AND SQL<15
              ---------
L3         25666 S L2 AND SQL<11          Claims 6, 12, 14


L4   (       183)SEA FILE=REGISTRY ABB=ON
KLVQLLTTT|ILHRLLQE|LLRYLLDK|LLRYLLD|L
               RYLLD|LLRYLL|LRYLL|LLRYLLDKD/SQSP
L5   (        25)SEA FILE=REGISTRY ABB=ON
QLLRYLLDKD|HQLLRYLLDKD|PQAQQKSLLQQLLT
               |LLQQLLTE|VTLLQLLLG|ILRKLLQE|ILKRLLQE|ILRRLLQE|ILKKLLQE/SQSP
L6          193 SEA FILE=REGISTRY ABB=ON  L4 OR L5   SEQ'S 1-17

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 09:48:14 ON 06 JAN 2000
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FILE COVERS 1967 - 6 Jan 2000  VOL 132 ISS 2
FILE LAST UPDATED: 4 Jan 2000  (20000104/ED)
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This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGlstRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d hsi l7-

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:end

=> d his l7-

(FILE 'REGISTRY' ENTERED AT 09:38:12 ON 06 JAN 2000)

FILE 'HCAPLUS' ENTERED AT 09:40:48 ON 06 JAN 2000

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L7         26806 S L3
L8           152 S L6
L9           699 S NUCLEAR (L) HORMONE (L) RECEPTOR#
L10            5 S L7 AND L9
L11           10 S L8 AND  L9
                 SELECT RN HIT L10 1-5
                 SELECT RN HIT L11 1-10
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Claims 1, 6, 12, 14
SEQ'S 1-17

FILE 'REGISTRY' ENTERED AT 09:46:07 ON 06 JAN 2000

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L12            22 S E64-85
L13            22 S L12 AND L3
L14            34 S E86-119
L15            34 S L14 AND L6
L16            19 S L15 NOT L13
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seq's from L10 + L11

FILE 'REGISTRY' ENTERED AT 09:47:42 ON 06 JAN 2000

FILE 'HCAPLUS' ENTERED AT 09:48:14 ON 06 JAN 2000

=> d .ca l10 1-5;d .ca l11 1-10

L10 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:	1999:641077 HCAPLUS
DOCUMENT NUMBER:	131:267023
TITLE:	Compositions and methods for detecting ligand-dependent nuclear receptor and coactivator interactions for drug screening
INVENTOR(S):	Northrop, Jeffrey Paul; Hart, Charles Praray; Schatz, Peter Joseph
PATENT ASSIGNEE(S):	Glaxo Group Ltd., UK
SOURCE:	PCT Int. Appl., 67 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950664	A1	19991007	WO 1999-US7168	19990401

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-53611 19980401

AB The invention provides a method based upon the two hybrid system for examg. the interactions of nuclear receptors. The invention is addnl. directed to compns. for use in the assay and a method of identifying ligands of nuclear receptors and their coactivator or corepressor proteins. The use of nuclear receptor:coactivator interactions as a means for identifying and categorizing nuclear receptor ligands to be used in high-throughput screening was evaluated. A direct interaction assay suitable for in vitro use with enzymic readout (ELISA) was constructed using fusion proteins contg. TR (thyroid hormone receptor) or ER (estrogen receptor) ligand-binding domains and fragments of the coactivator protein, SRC-1. Specific, ligand-dependent interaction was demonstrated.

IC ICM G01N033-53
ICS G01N033-567; G01N033-542; C07K002-00; C07K004-00; C07K016-00

CC 1-1 (Pharmacology)
Section cross-reference(s): 2, 3, 9

ST ligand **nuclear receptor** coactivator interaction; drug screening ligand **nuclear receptor** coactivator; thyroid **hormone receptor** fusion protein; estrogen **receptor** fusion protein

IT Proteins (specific proteins and subclasses)
RL: BPN (Biosynthetic preparation); BPR (Biological process); BIOL (Biological study); PREP (Preparation); PROC (Process)
(SMRT (silencing mediator of retinoic acid and thyroid **hormone receptor**); compns. and methods for detecting ligand-dependent **nuclear receptor** and coactivator interactions for drug screening)

IT Estrogen receptors
Thyroid **hormone receptors**
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR (Biological process); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(ligand-binding domain of, fusion proteins contg.; compns. and methods for detecting ligand-dependent **nuclear receptor** and coactivator interactions for drug screening)

IT 245343-89-9P 245343-90-2P 245343-91-3P 245343-92-4P 245343-93-5P
245343-94-6P 245343-95-7P 245343-96-8P 245343-97-9P
245343-98-0P 245343-99-1P 245344-00-7P 245344-01-8P
245344-02-9P 245344-03-0P 245344-04-1P 245344-05-2P 245344-06-3P
RL: BAC (Biological activity or effector, except adverse); BPN

(Biosynthetic preparation); BPR (Biological process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(screening of, with immobilized GST-estrogen receptor in presence of estradiol; compns. and methods for detecting ligand-dependent nuclear receptor and coactivator interactions for drug screening)

L10 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:641074 HCAPLUS
DOCUMENT NUMBER: 131:282013
TITLE: Methods and compounds for modulating nuclear receptor activity
INVENTOR(S): Shiau, Andrew; Kushner, Peter J.; Agard, David A.; Greene, Geoffrey L.
PATENT ASSIGNEE(S): University of California, USA; Arch Development Corp.
SOURCE: PCT Int. Appl., 207 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950658	A2	19991007	WO 1999-US6937	19990330
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
WO 9960014	A2	19991125	WO 1999-US6899	19990330
W: AU, CA, JP, KR				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.: US 1998-PV79956 19980330
US 1998-PV113014 19981216
US 1998-PV113146 19981216

AB The present invention relates to methods and agonist/antagonist compds. for modulating nuclear receptor activity, and nuclear receptor ligand binding. The invention includes a method for identifying residues comprising a ligand binding domain for a nuclear receptor of interest. Also included in a method of identifying agonists and/or antagonists that bind to the ligand binding domain of the nuclear receptors, and the estrogen receptor in particular. The invention is exemplified by identification and manipulation of the ligand binding domain of the estrogen receptor and compds. that bind to this site. The methods can be applied to other nuclear receptors including TR, GR and PR.

IC ICM G01N033-48
CC 2-1 (Mammalian Hormones)
Section cross-reference(s): 1
IT Androgen receptors
Estrogen receptors
Glucocorticoid receptors
Ligands
Mineralocorticoid receptors
Nuclear receptors
Peptides, biological studies
Progesterone receptors
Retinoid receptors

Thyroid **hormone receptors**
Vitamin D receptors
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(screening for compds. modulating **nuclear receptor** activity)

IT 50-28-2, 17.beta.-Estradiol, biological studies 56-53-1, Diethylstilbestrol 84-16-2, Mesohexestrol 143-50-0, Kepone 479-13-0,
Coumestrol 789-02-6 1972-08-3, .DELTA.9-Thc 10540-29-1, Tamoxifen 17924-92-4, Zearalenone 34816-55-2, Moxestrol 84449-90-1, Raloxifene 98007-99-9 155701-61-4, Gw5638 182167-03-9, Em800 205128-72-9
245122-98-9 245122-99-0 245123-00-6 245123-01-7
245123-02-8 245123-03-9 245123-04-0 245123-05-1 245123-06-2
245123-07-3 245123-08-4 245123-09-5 245676-26-0 245676-32-8
245676-38-4 245676-43-1 245676-45-3 245676-46-4 245676-47-5
245676-49-7 245676-54-4 246236-26-0
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(screening for compds. modulating nuclear receptor activity)

IT **245742-95-4 245742-96-5**
RL: PRP (Properties)
(unclaimed protein sequence; methods and compds. for modulating nuclear receptor activity)

L10 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:632635 HCAPLUS
DOCUMENT NUMBER: 131:346702
TITLE: NRIF3 is a novel coactivator mediating functional specificity of **nuclear hormone receptors**
AUTHOR(S): Li, Dangsheng; Desai-Yajnik, Vandana; Lo, Eric; Schapira, Matthieu; Abagyan, Ruben; Samuels, Herbert H.
CORPORATE SOURCE: Division of Molecular Endocrinology, Departments of Medicine and Pharmacology, New York University School of Medicine, New York, New York, NY, 10016, USA
SOURCE: Mol. Cell. Biol. (1999), 19(10), 7191-7202
CODEN: MCEBD4; ISSN: 0270-7306
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Many nuclear receptors are capable of recognizing similar DNA elements. The mol. event(s) underlying the functional specificities of these receptors (in regulating the expression of their native target genes) is a very important issue that remains poorly understood. Here the authors report the cloning and anal. of a novel nuclear receptor coactivator (designated NRIF3) that exhibits a distinct receptor specificity. Fluorescence microscopy shows that NRIF3 localizes to the cell nucleus. The yeast two-hybrid and/or in vitro binding assays indicated that NRIF3 specifically interacts with the thyroid hormone receptor (TR) and retinoid X receptor (RXR) in a ligand-dependent fashion but does not bind to the retinoic acid receptor, vitamin D receptor, progesterone receptor, glucocorticoid receptor, or estrogen receptor. Functional expts. showed

that NRIF3 significantly potentiates TR- and RXR-mediated transactivation in vivo but has little effect on other examd. nuclear receptors. Domain and mutagenesis analyses indicated that a novel C-terminal domain in NRIF3
plays an essential role in its specific interaction with liganded TR and RXR while the N-terminal LXXLL motif plays a minor role in allowing optimum interaction. Computer modeling and subsequent exptl. anal. suggested that the C-terminal domain of NRIF3 directly mediates interaction with liganded receptors through an LXXIL (a variant of the canonical LXXLL) module while the other part of the NRIF3 protein may still play a role in conferring its receptor specificity. Identification of a coactivator with such a unique receptor specificity may provide new insight into the mol. mechanism(s) of receptor-mediated transcriptional activation as well as the functional specificities of nuclear receptors.

CC 2-2 (Mammalian Hormones)
Section cross-reference(s): 3

ST NRIF3 coactivator sequence human; transcription factor NRIF3 **nuclear receptor** binding structure; thyroid **hormone receptor** NRIF3 coactivator binding structure; retinoid RXR **receptor** NRIF3 coactivator binding structure

IT Transcription factors
RL: BOC (Biological occurrence); BPR (Biological process); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(NRIF3 (**nuclear receptor**-interacting factor 3); sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)

IT Transcriptional regulation
(activation; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)

IT Retinoid X **receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(complexes with retinoate; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)

IT Thyroid **hormone receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(complexes with triiodothyronine; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)

IT **Hormone receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(**nuclear**; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)

IT Structure-activity relationship
(**receptor**-binding; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)

IT Cell nucleus
Molecular modeling
Protein sequences
cDNA sequences
.alpha.-Helix
(sequencing of human NRIF3 coactivator and involvement in

transcriptional activation by **nuclear hormone receptors**)
IT Retinoid X **receptors**
Thyroid **hormone receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)
IT Protein motifs
(transcriptional factor NRIF3 C-terminal domain; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)
IT 250677-92-0
RL: BOC (Biological occurrence); BPR (Biological process); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(amino acid sequence; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)
IT 243888-17-7, GenBank AF175306
RL: PRP (Properties)
(nucleotide sequence; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)
IT 153559-57-0, LG100153
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)
IT 5300-03-8, 9-cis-Retinoic acid 6893-02-3, Triiodothyronine
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)
IT 5300-03-8D, 9-cis-Retinoic acid, **receptor** complexes
6893-02-3D, Triiodothyronine, **receptor** complexes
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)
IT 61-90-5, Leucine, biological studies
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(transcriptional factor C-terminal domain; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)
IT **250591-21-0** 250591-22-1
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(transcriptional factor NRIF3 C-terminal domain; sequencing of human NRIF3 coactivator and involvement in transcriptional activation by **nuclear hormone receptors**)

L10 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:359735 HCAPLUS

DOCUMENT NUMBER: 131:687
TITLE: **Nuclear hormone receptor** drug screens
INVENTOR(S): Lustig, Kevin; Baeuerle, Patrick; Beckmann, Holger; Chen, Jin-Long; Shan, Bei
PATENT ASSIGNEE(S): Tularik Inc., USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9927365	A1	19990603	WO 1998-US24969	19981120
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9915989	A1	19990615	AU 1999-15989	19981120
PRIORITY APPLN. INFO.:			US 1997-975614	19971121
			US 1998-163713	19980930
			WO 1998-US24969	19981120

AB Methods for identifying modulators of nuclear hormone receptor function comprise the steps of (a) forming a mixt. comprising a nuclear hormone receptor, a peptide sensor and a candidate agent, but not a natural coactivator protein of the receptor, wherein the sensor provides direct, in vitro binding to the receptor under assay conditions; (b) measuring an agent-biased binding of the sensor to the receptor; and (c) comparing the agent-biased binding with a corresponding unbiased binding of the sensor to the receptor. In particular embodiments, the sensor comprises an amphipathic alpha helix nuclear hormone interacting domain comprising a recited nuclear hormone transcriptional coactivator motif sequence, the sensor is present at sub-micromolar concn., the binding reaction occurs in soln., the sensor comprises a fluorescent label and the measuring step comprises detecting fluorescence polarization of the label. Reagents include labeled sensor peptides and reaction mixts. consisting essentially of nuclear hormone receptor, a peptide and a candidate.

IC ICM G01N033-53
ICS G01N033-566
CC 1-1 (Pharmacology)
Section cross-reference(s): 2
ST drug screening **nuclear hormone receptor** ligand; peptide sensor **nuclear receptor** ligand screening
IT Thyroid **hormone receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(4, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(COR, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(COUP-TF.alpha. and COUP-TF.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(COUP-TF.gamma., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT Steroid **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(DAX-1; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ERR (estrogen-related **receptor**) .alpha. and .beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(FXR, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT Orphan **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(GCNF (germ cell **nuclear** factor), ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(HZF-2.alpha., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(LXR.alpha. and LXR.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(MB67.alpha., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT Transcription factors

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(NGFI-B.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Orphan **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(NOR1 (neuron-derived orphan **receptor**-1), ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Orphan **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(NURR1 (Nur-related factor 1), ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Nur-77, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Retinoid **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ROR.alpha. (retinoid orphan **receptor** .alpha.), ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Retinoid **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(RZR.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Rev-ErbA.alpha. and Rev-ErbA.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(SHP, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(TOR, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Steroid **receptors**
Thyroid **hormone receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(TR2-11 (thyroid/steroid **hormone receptor** 2-11), .alpha. and .beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Tlx, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Avidins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(immobilized; method for screening of ligands of **nuclear hormone receptors**)

IT Epitopes
(labels; method for screening of ligands of **nuclear hormone receptors**)

IT Peroxisome proliferator-activated **receptor** .gamma.
Steroidogenic factor 1
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Biosensors
Drug screening
Drugs
Fluorescent indicators
Protein sequences
(method for screening of ligands of **nuclear hormone receptors**)

IT Ligands
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); ANST (Analytical study); BIOL (Biological study)
(method for screening of ligands of **nuclear hormone receptors**)

IT Antibodies
Peptides, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method for screening of ligands of **nuclear hormone receptors**)

IT **Hormone receptors**
Nuclear receptors
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for screening of ligands of **nuclear hormone receptors**)

IT HNF-4 (hepatocyte **nuclear** factor 4)
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(.alpha., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT 58-85-5, Biotin 13558-31-1D, derivs.
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(label; method for screening of ligands of **nuclear hormone receptors**)

IT 2140-46-7, 25-Hydroxycholesterol 5300-03-8, 9-cis-Retinoic acid 17752-16-8, 24-Ketocholesterol 17954-98-2 22348-64-7 30271-38-6, 24-Hydroxycholesterol 72542-49-5, 24,25-Epoxycholesterol 122320-73-4, BRL 49653
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); ANST (Analytical study); BIOL (Biological study)
(method for screening of ligands of **nuclear hormone receptors**)

IT 50812-37-8D, Glutathione S-transferase, fusion protein with

nuclear hormone receptor ligand-binding domain
202394-77-2 214893-80-8 215598-57-5
215598-58-6 215598-59-7 215598-60-0
225916-28-9 225916-29-0 225916-30-3
225916-31-4 225916-32-5 225916-33-6
225916-34-7 225916-35-8 225916-36-9
225916-37-0 225916-38-1
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method for screening of ligands of **nuclear hormone receptors**)

L10 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1998:71152 HCAPLUS
DOCUMENT NUMBER: 128:150402
TITLE: Transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors
INVENTOR(S): Chambon, Pierre; Gronemeyer, Hinrich; Voegel, Johannes; Lutz, Yves
PATENT ASSIGNEE(S): Institut National De La Sante Et De La Recherche Medicale, Fr.; Centre National De La Recherche Scientifique; Universite Louis Pasteur; Bristol-Myers Squibb Company
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9802455	A2	19980122	WO 1997-US12100	19970711
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 939810	A2	19990908	EP 1997-932575	19970711
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1996-21247	19960712
			WO 1997-US12100	19970711

AB The present invention concerns a nuclear receptor (NR) transcriptional mediator. More specifically, isolated nucleic acid mols. are provided encoding transcriptional intermediary factor-2 (TIF2). Nuclear receptors (NRs) act as ligand-inducible transcription factors which regulate the expression of target genes upon binding to cognate response elements. The ligand-dependent activity of the NR activation function AF-2 is believed to be mediated to the transcription machinery through transcriptional mediators/intermediary factors (TIFs). This invention describes the cloning of the 160-kDa human nuclear protein TIF2, which exhibits all properties expected for a mediator of AF-2: (1) it interacts in vivo with NRs in an agonist-dependent manner; (2) it binds directly to the ligand-binding domains (LBDs) of NRs in an agonist- and AF-2-integrity-dependent manner in vitro; (3) it harbors an autonomous transcriptional activation function; (4) it relieves nuclear receptor autosquelching; and (5) it enhances the activity of some nuclear receptor

AF-2s when overexpressed in mammalian cells. TIF2 exhibits partial sequence homol. with the recently isolated steroid receptor coactivator SRC-1, indicating the existence of a novel gene family of nuclear receptor transcriptional mediators. Recombinant methods for making TIF2 polypeptides are also provided as are TIF2 antibodies. Screening methods are also provided for identifying agonists and antagonists of the activation function AF-2 of nuclear receptors, for identifying agonists and antagonists of the AD1 activation domain activity of TIF2, and for identifying agonists and antagonists of the AD2 activation domain activity of TIF2.

IC ICM C07K014-00

CC 3-4 (Biochemical Genetics)
Section cross-reference(s): 2, 6, 13

IT Androgen receptors
Estrogen receptors
Glucocorticoid receptors
Nuclear receptors
Progesterone receptors
Retinoic acid receptor .alpha.
Retinoic acid receptors
Retinoid X receptors
Thyroid **hormone receptors**
Vitamin D receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of **nuclear receptors**)

IT **202394-75-0P 202394-76-1P 202394-77-2P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors)

L11 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:359735 HCAPLUS
DOCUMENT NUMBER: 131:687
TITLE: **Nuclear hormone receptor** drug screens
INVENTOR(S): Lustig, Kevin; Baeuerle, Patrick; Beckmann, Holger; Chen, Jin-Long; Shan, Bei
PATENT ASSIGNEE(S): Tularik Inc., USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9927365 A1 19990603 WO 1998-US24969 19981120
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9915989 A1 19990615 AU 1999-15989 19981120
PRIORITY APPLN. INFO.: US 1997-975614 19971121
US 1998-163713 19980930
WO 1998-US24969 19981120

AB Methods for identifying modulators of nuclear hormone receptor function comprise the steps of (a) forming a mixt. comprising a nuclear hormone receptor, a peptide sensor and a candidate agent, but not a natural coactivator protein of the receptor, wherein the sensor provides direct, in vitro binding to the receptor under assay conditions; (b) measuring an agent-biased binding of the sensor to the receptor; and (c) comparing the agent-biased binding with a corresponding unbiased binding of the sensor to the receptor. In particular embodiments, the sensor comprises an amphipathic alpha helix nuclear hormone interacting domain comprising a recited nuclear hormone transcriptional coactivator motif sequence, the sensor is present at sub-micromolar concn., the binding reaction occurs in soln., the sensor comprises a fluorescent label and the measuring step comprises detecting fluorescence polarization of the label. Reagents include labeled sensor peptides and reaction mixts. consisting essentially of nuclear hormone receptor, a peptide and a candidate.

IC ICM G01N033-53
ICS G01N033-566
CC 1-1 (Pharmacology)
Section cross-reference(s): 2
ST drug screening **nuclear hormone receptor** ligand; peptide sensor **nuclear receptor** ligand screening
IT Thyroid **hormone receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(4, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(COR, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(COUP-TF.alpha. and COUP-TF.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(COUP-TF.gamma., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Steroid **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(DAX-1; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ERR (estrogen-related **receptor**) .alpha. and .beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(FXR, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Orphan **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(GCNF (germ cell **nuclear** factor), ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(HZF-2.alpha., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(LXR.alpha. and LXR.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(MB67.alpha., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Transcription factors
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(NGFI-B.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Orphan **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(NOR1 (neuron-derived orphan **receptor**-1), ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)

IT Orphan **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(NURR1 (Nur-related factor 1), ligand-binding domain of; method for screening of ligands of **nuclear hormone**

receptors)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Nur-77, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT Retinoid **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ROR.alpha. (retinoid orphan **receptor** .alpha.), ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT Retinoid **receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(RZR.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Rev-ErbA.alpha. and Rev-ErbA.beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(SHP, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(TOR, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT Steroid **receptors**
Thyroid **hormone receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(TR2-11 (thyroid/steroid **hormone receptor** 2-11), .alpha. and .beta., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT **Nuclear receptors**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Tlx, ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT Avidins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(immobilized; method for screening of ligands of **nuclear hormone receptors**)
IT Epitopes
(labels; method for screening of ligands of **nuclear hormone receptors**)
IT Peroxisome proliferator-activated **receptor** .gamma.
Steroidogenic factor 1
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ligand-binding domain of; method for screening of ligands of

nuclear hormone receptors)
IT Biosensors
Drug screening
Drugs
Fluorescent indicators
Protein sequences
(method for screening of ligands of **nuclear hormone receptors**)
IT Ligands
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); ANST (Analytical study); BIOL (Biological study)
(method for screening of ligands of **nuclear hormone receptors**)
IT Antibodies
Peptides, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method for screening of ligands of **nuclear hormone receptors**)
IT **Hormone receptors**
Nuclear receptors
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for screening of ligands of **nuclear hormone receptors**)
IT HNF-4 (hepatocyte **nuclear** factor 4)
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(.alpha., ligand-binding domain of; method for screening of ligands of **nuclear hormone receptors**)
IT 58-85-5, Biotin 13558-31-1D, derivs.
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(label; method for screening of ligands of **nuclear hormone receptors**)
IT 2140-46-7, 25-Hydroxycholesterol 5300-03-8, 9-cis-Retinoic acid 17752-16-8, 24-Ketocholesterol 17954-98-2 22348-64-7 30271-38-6, 24-Hydroxycholesterol 72542-49-5, 24,25-Epoxycholesterol 122320-73-4, BRL 49653
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); ANST (Analytical study); BIOL (Biological study)
(method for screening of ligands of **nuclear hormone receptors**)
IT 50812-37-8D, Glutathione S-transferase, fusion protein with **nuclear hormone receptor** ligand-binding domain
202394-77-2 214893-80-8 215598-57-5
215598-58-6 215598-59-7 215598-60-0
225916-28-9 225916-29-0 225916-30-3
225916-31-4 225916-32-5 225916-33-6
225916-34-7 225916-35-8 225916-36-9
225916-37-0 225916-38-1
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method for screening of ligands of **nuclear hormone receptors**)

L11 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:8011 HCAPLUS
DOCUMENT NUMBER: 130:62064
TITLE: Transcription factor coactivator protein p/CIP binds

CBP and mediates nuclear receptor function
INVENTOR(S): Rosenfield, Michael G.; Glass, Christopher K.; Rose, David W.; Torchia, Joseph
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9856806	A1	19981217	WO 1998-US12263	19980612
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9881421	A1	19981230	AU 1998-81421	19980612
PRIORITY APPLN. INFO.:			US 1997-49452	19970612
			WO 1998-US12263	19980612

AB The present invention provides a substantially purified nucleic acid mol. encoding a p/CIP polypeptide, which regulates the activity of CBP/p300-dependent transcription factors. The invention also provides a substantially purified p-CIP polypeptide and active fragments thereof. Factor p/CIP is present in the cell as a complex with CBP and is required for transcriptional activity of nuclear receptors and other CBP/p300-dependent transcription factors. NCoA-1 and NCoA-2 are also provided, and are required for activation of genes by nuclear receptors. All 3 factors contains related leucine-rich charged helical interaction motifs that are required for receptor-specific mechanisms of gene activation, and allow the selective inhibition of distinct signal-transduction pathways. In addn., the invention provides methods of identifying an effective agent that alters the assocn. of a p/CIP polypeptide with a second protein. Further provided herein are methods of selectively inhibiting signal transduction pathways using an active fragment of a p/CIP polypeptide or a nucleic acid mol. encoding such an active fragment.

IC ICM C07H021-04
ICS C07K014-00; C12N015-12; G01N033-53

CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 6, 13

IT ERE (estrogen-responsive element)
Estrogen receptors
Nuclear receptors
Progesterone receptors
Retinoic acid receptors
TRE (thyroid **hormone**-response element)
Thyroid **hormone receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(transcription factor coactivator protein p/CIP binds CBP and mediates

nuclear receptor function)

IT **193488-33-4**, Transcription factor p/CIP (co-integrator-assocd. protein) (mouse) **193488-34-5**, Transcription factor NCoA-2 (nuclear receptor co-activator 2) (mouse) **218134-59-9** 218134-60-2 218134-61-3 **218134-62-4 218134-63-5** **218134-64-6**
RL: ARG (Analytical reagent use); BPR (Biological process); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(amino acid sequence; transcription factor coactivator protein p/CIP binds CBP and mediates nuclear receptor function)

L11 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1998:803920 HCAPLUS
DOCUMENT NUMBER: 130:48285
TITLE: Identification of polypeptides that interact with **nuclear hormone receptors**
INVENTOR(S): Moore, David D.; Lee, Jae Woon
PATENT ASSIGNEE(S): The General Hospital Corporation, USA
SOURCE: U.S., 69 pp., Cont.-in-part of U.S. Ser. No. 969,136, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5846711	A	19981208	US 1994-222719	19940404
US 5866686	A	19990202	US 1995-470925	19950606
US 5962256	A	19991005	US 1995-471613	19950606
PRIORITY APPLN. INFO.:			US 1992-969136	19921030
			US 1994-222719	19940404

AB A method for detg. whether a test protein is capable of interacting with a nuclear hormone receptor protein based on the in vivo interaction trap system is described. The method uses a host cell carrying a reporter gene under control of a protein binding site; a chimeric gene for a fusion protein of a nuclear hormone receptor and a binding moiety capable of specifically binding to the protein binding site; and a second chimeric gene for a fusion protein of the test protein covalently bonded to a weak gene activating moiety. The effect of the test protein on the level of expression of the reporter gene is detd.: if it increases expression of the reporter gene then this indicates its ability to interact with the nuclear hormone receptor protein. Such an interaction may be hormone dependent, hormone independent, or hormone sensitive. A no. of proteins interacting interacting with a thyroid hormone receptor were identified using a fusion protein of the receptor and the lexA protein and a fusion protein of the candidate with the weak B42 activation domain to activate expression of the LEU2 gene.

IC ICM C12Q001-68
ICS C12P021-06; C12N015-00; C07H017-00
NCL 435006000
CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 2

ST **nuclear hormone receptor** binding protein assay; sequence human thyroid **hormone receptor** binding protein cDNA

IT Transcription factors
RL: ARU (Analytical role, unclassified); BPR (Biological process); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(B42, test protein fused to; identification of polypeptides that interact with **nuclear hormone receptors**)

IT Chimeric genes
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(for **nuclear hormone receptors** and transcription activators; identification of polypeptides that interact with **nuclear hormone receptors**)

IT Reporter genes
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(identification of polypeptides that interact with **nuclear hormone receptors**)

IT Antibodies
Thyroid **hormone receptors**
RL: ARG (Analytical reagent use); BPR (Biological process); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(identification of polypeptides that interact with **nuclear hormone receptors**)

IT Ligands
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(identification of polypeptides that interact with **nuclear hormone receptors**)

IT Genetic methods
(in vivo trap interaction; identification of polypeptides that interact with **nuclear hormone receptors**)

IT **Receptors**
RL: ARG (Analytical reagent use); BPR (Biological process); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(**nuclear hormone**; identification of polypeptides that interact with **nuclear hormone receptors**)

IT 158105-03-4, Thyroid **hormone receptor**-binding protein S309a-(human) 158105-04-5, Thyroid **hormone receptor**-binding protein S223a-fragment (human) 158105-05-6, Thyroid **hormone receptor**-binding protein S110a-fragment (human) 158124-33-5, Thyroid **hormone receptor**-binding protein S110a-(human) 158163-11-2, Thyroid **hormone receptor**-binding protein S101a (human) **158163-19-0**, Thyroid **hormone receptor**-binding protein S205a (human) 158163-20-3, Thyroid **hormone receptor**-binding protein S107a-(human) 158163-28-1 158163-29-2 158163-30-5 158708-22-6 158708-23-7 158708-24-8 158708-25-9 158708-26-0 158708-27-1 158708-28-2 158708-29-3 158708-30-6 158708-31-7 158708-32-8 158708-33-9 158708-34-0 158708-35-1 158708-36-2 158708-37-3 158708-38-4 158708-39-5 158708-40-8 158708-41-9 158708-42-0 158708-43-1 158708-44-2 158708-45-3 158708-46-4 158708-47-5 158708-48-6 158708-49-7 158708-50-0 158708-51-1 158708-52-2 158708-53-3 158708-54-4 158708-55-5 158708-56-6 158708-57-7 158708-58-8 158708-59-9 158708-60-2 158708-61-3 158708-62-4 158708-63-5 158708-64-6 158708-65-7
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study);

PROC (Process)
(identification of polypeptides that interact with **nuclear hormone receptors**)

L11 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1998:646711 HCAPLUS
DOCUMENT NUMBER: 130:11699
TITLE: Mechanistic principles in NR box-dependent interaction between **nuclear hormone receptors** and the coactivator TIF2
AUTHOR(S): Leers, Jorg; Treuter, Eckardt; Gustafsson, Jan-Ake
CORPORATE SOURCE: Center for Biotechnology, Department of Biosciences, Karolinska Institute, NOVUM, Huddinge, S-14157, Swed.
SOURCE: Mol. Cell. Biol. (1998), 18(10), 6001-6013
CODEN: MCEBD4; ISSN: 0270-7306
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Nuclear hormone receptors exert transcriptional activation of target genes upon hormone induction via interactions with the basal transcription machinery. This interaction is mediated by cofactors which phys. bind to receptors, thereby acting as coactivators or corepressors leading to activation or repression, resp. Here we report the screening for and cloning of a peroxisome proliferator receptor-interacting protein, the rat homolog of TIF2. By sequence comparison with the related coactivator SRC-1, we identified three short conserved motifs (NR boxes) in both proteins which are the putative binding sites of TIF2 to nuclear hormone receptors. We demonstrate here by generation of amino acid exchanges within the NR boxes that all three boxes located in the receptor interaction domain of TIF2 are necessary and sufficient for interaction. The three boxes individually can bind to hormone receptors but display preferences in binding for certain receptors. In addn., we show that the interaction domain of TIF2 can compete with other AF-2-dependent cofactors for binding to receptors. Finally, we demonstrate cooperative binding of two TIF2 mols. to a heterodimeric nuclear receptor complex even in the presence of only one cognate ligand, indicating an allosteric effect on the heterodimeric partner upon coactivator binding.
CC 6-3 (General Biochemistry)
Section cross-reference(s): 2, 3
ST coactivator TIF2 NR box **hormone receptor**; TIF2 NR **nuclear hormone receptor** interaction; rat coactivator TIF2 protein sequence
IT Protein motifs
(NR boxes and IAD domain (central interaction domain); mechanistic principles in NR box-dependent interaction between **nuclear hormone receptors** and the coactivator TIF2)
IT Transcription factors
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(TIF2; mechanistic principles in NR box-dependent interaction between **nuclear hormone receptors** and the coactivator TIF2)
IT Conformation (protein)

Molecular association
Protein sequences
Rat
(mechanistic principles in NR box-dependent interaction between **nuclear hormone receptors** and the coactivator TIF2)

IT Retinoid X **receptor** .alpha.
Retinoid X **receptor** .beta.
Thyroid **hormone receptor** .alpha.
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(mechanistic principles in NR box-dependent interaction between **nuclear hormone receptors** and the coactivator TIF2)

IT Peroxisome proliferator-activated **receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(.alpha.; mechanistic principles in NR box-dependent interaction between **nuclear hormone receptors** and the coactivator TIF2)

IT **216067-47-9**, Transcription factor TIF2 (rat reduced)
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(amino acid sequence; mechanistic principles in NR box-dependent interaction between **nuclear hormone receptors** and the coactivator TIF2)

L11 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1998:71152 HCAPLUS
DOCUMENT NUMBER: 128:150402
TITLE: Transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors
INVENTOR(S): Chambon, Pierre; Gronemeyer, Hinrich; Voegel, Johannes; Lutz, Yves
PATENT ASSIGNEE(S): Institut National De La Sante Et De La Recherche Medicale, Fr.; Centre National De La Recherche Scientifique; Universite Louis Pasteur; Bristol-Myers Squibb Company
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9802455	A2	19980122	WO 1997-US12100	19970711
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 939810	A2	19990908	EP 1997-932575	19970711
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: US 1996-21247 19960712
WO 1997-US12100 19970711

AB The present invention concerns a nuclear receptor (NR) transcriptional mediator. More specifically, isolated nucleic acid mols. are provided

encoding transcriptional intermediary factor-2 (TIF2). Nuclear receptors (NRs) act as ligand-inducible transcription factors which regulate the expression of target genes upon binding to cognate response elements. The ligand-dependent activity of the NR activation function AF-2 is believed to be mediated to the transcription machinery through transcriptional mediators/intermediary factors (TIFs). This invention describes the cloning of the 160-kDa human nuclear protein TIF2, which exhibits all properties expected for a mediator of AF-2: (1) it interacts in vivo with NRs in an agonist-dependent manner; (2) it binds directly to the ligand-binding domains (LBDs) of NRs in an agonist- and AF-2-integrity-dependent manner in vitro; (3) it harbors an autonomous transcriptional activation function; (4) it relieves nuclear receptor autosquelching; and (5) it enhances the activity of some nuclear receptor AF-2s when overexpressed in mammalian cells. TIF2 exhibits partial sequence homol. with the recently isolated steroid receptor coactivator SRC-1, indicating the existence of a novel gene family of nuclear receptor transcriptional mediators. Recombinant methods for making TIF2 polypeptides are also provided as are TIF2 antibodies. Screening methods are also provided for identifying agonists and antagonists of the activation function AF-2 of nuclear receptors, for identifying agonists and antagonists of the AD1 activation domain activity of TIF2, and for identifying agonists and antagonists of the AD2 activation domain activity of TIF2.

IC ICM C07K014-00

CC 3-4 (Biochemical Genetics)
Section cross-reference(s): 2, 6, 13

IT Androgen receptors
Estrogen receptors
Glucocorticoid receptors
Nuclear receptors
Progesterone receptors
Retinoic acid receptor .alpha.
Retinoic acid receptors
Retinoid X receptors
Thyroid **hormone receptors**
Vitamin D receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of **nuclear receptors**)

IT **202486-16-6P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(TIF2.1 fragment; transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors)

IT **202486-18-8P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(TIF2.3 fragment; transcriptional intermediary factor TIF2 is a 160-kDa

transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors)

IT **202486-19-9P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(TIF2.4 fragment; transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors)

IT **202486-20-2P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(TIF2.5 fragment; transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors)

IT **202486-13-3P 202486-14-4P** 202486-15-5P
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(amino acid sequence; transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors)

IT 202394-75-0P 202394-76-1P **202394-77-2P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(transcriptional intermediary factor TIF2 is a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors)

L11 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1997:729604 HCAPLUS
DOCUMENT NUMBER: 128:58750
TITLE: TRAM-1, a novel 160-kDa thyroid hormone receptor activator molecule, exhibits distinct properties from steroid receptor coactivator-1
AUTHOR(S): Takeshita, Akira; Cardona, Guemalli R.; Koibuchi, Noriyuki; Suen, Chen-Shian; Chin, William W.
CORPORATE SOURCE: Division of Genetics, Department of Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, 02115, USA
SOURCE: J. Biol. Chem. (1997), 272(44), 27629-27634
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Nuclear hormone receptors (NRs) are ligand-dependent transcription factors that regulate target gene transcription. The authors report the mol. cloning and characterization of a novel human cDNA encoding TRAM-1, a thyroid hormone receptor activator mol., a .apprx.160-kDa protein homologous with SRC-1/TIF2, by far-Western-based expression screening. TRAM-1 binds to thyroid hormone receptor (TR) and other NRs in a

ligand-dependent manner and enhances ligand-induced transcriptional activity of TR. The AF-2 region in NRs has been thought to play a crit. role in mediating ligand-dependent transactivation by the interaction with coactivators. Surprisingly, TRAM-1 retains strong ligand-dependent interaction with an AF-2 mutant of TR (E457A), while SRC-1 fails to interact with this mutant. Furthermore, the authors identified a crit. TRAM-1 binding site in rat TR.beta.1 outside of AF-2, as TRAM-1 shows weak ligand-dependent interaction with a helix 3 ligand binding domain TR mutant (K288A), compared with SRC-1. These results suggest that TRAM-1 is a coactivator that may exhibit its activity by interacting with subdomains of NRs other than the AF-2 region, in contrast to SRC-1/TIF2.

CC 6-3 (General Biochemistry)
Section cross-reference(s): 2, 3

IT Transcription factors
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(SRC-1 (steroid **receptor** coactivator-1); cDNA sequence of human thyroid **hormone receptor** activator mol. TRAM-1 and deletion anal. of its interactions with **nuclear hormone receptors**)

IT Transcription factors
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(TRAM-1 (thyroid **hormone receptors** activator mol. 1); cDNA sequence of human thyroid **hormone receptor** activator mol. TRAM-1 and deletion anal. of its interactions with **nuclear hormone receptors**)

IT Protein motifs
Protein sequences
Transcriptional regulation
cDNA sequences
(cDNA sequence of human thyroid **hormone receptor** activator mol. TRAM-1 and deletion anal. of its interactions with **nuclear hormone receptors**)

IT Estrogen **receptors**
Hormone receptors
Retinoic acid **receptors**
Retinoid X **receptors**
TRE (thyroid **hormone**-response element)
Thyroid **hormone receptors**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(cDNA sequence of human thyroid **hormone receptor** activator mol. TRAM-1 and deletion anal. of its interactions with **nuclear hormone receptors**)

IT Thyroid **hormone receptor** .beta.1
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(cDNA sequence of human thyroid **hormone receptor** activator mol. TRAM-1 and deletion anal. of its interactions with **nuclear hormone receptors**)

IT **200222-66-8P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(amino acid sequence; cDNA sequence of human thyroid **hormone receptor** activator mol. TRAM-1 and deletion anal. of its interactions with **nuclear hormone receptors**)

IT 6893-02-3, Triiodothyronine
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(cDNA sequence of human thyroid **hormone receptor** activator mol. TRAM-1 and deletion anal. of its interactions with **nuclear hormone receptors**)

IT 199491-28-6, GenBank AF016031
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; cDNA sequence of human thyroid **hormone receptor** activator mol. TRAM-1 and deletion anal. of its interactions with **nuclear hormone receptors**)

L11 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1997:401373 HCAPLUS
DOCUMENT NUMBER: 127:157534
TITLE: The transcriptional co-activator p/CIP binds CBP and mediates nuclear-receptor function
AUTHOR(S): Torchia, Joseph; Rose, David W.; Inostroza, Juan; Kamei, Yasutomi; Westin, Stefan; Glass, Christopher K.; Rosenfeld, Michael G.
CORPORATE SOURCE: Howard Hughes Med. Inst., Univ. California, San Diego, La Jolla, CA, 92093-0648, USA
SOURCE: Nature (London) (1997), 387(6634), 677-684
CODEN: NATUAS; ISSN: 0028-0836
PUBLISHER: Macmillan Magazines
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The functionally conserved proteins CBP and p300 act in conjunction with other factors to activate transcription of DNA. A new factor, p/CIP, has been discovered that is present in the cell as a complex with CBP and is required for transcriptional activity of nuclear receptors and other CBP/p300-dependent transcription factors. The highly related nuclear-receptor co-activator protein NCoA-1 is also specifically required for ligand-dependent activation of genes by nuclear receptors. P/CIP, NCoA-1 and CBP all contain related leucine-rich charged helical interaction motifs that are required for receptor-specific mechanisms of gene activation, and allow the selective inhibition of distinct signal-transduction pathways.

CC 3-4 (Biochemical Genetics)
Section cross-reference(s): 2, 13

ST transcription factor pCIP CBP **nuclear receptor**; **hormone receptor** transcription factor pCIP CBP; human transcription factor pCIP NCoA2 sequence; cDNA sequence transcription factor pCIP NCoA2

IT Progesterone receptors
Thyroid **hormone receptors**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(p/CIP requirement for action of; transcriptional co-activator p/CIP binds CBP and mediates **nuclear-receptor** function)
IT ERE (estrogen-responsive element)
TRE (thyroid **hormone**-response element)
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(transcriptional co-activator p/CIP binds CBP and mediates **nuclear-receptor** function)
IT **193488-33-4 193488-34-5**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(amino acid sequence; transcriptional co-activator p/CIP binds CBP and mediates nuclear-receptor function)

L11 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1996:607636 HCAPLUS
DOCUMENT NUMBER: 125:294320
TITLE: The **nuclear hormone receptor** coactivator SRC-1 is a specific target of p300
AUTHOR(S): Yao, Pso-Pang; Ku, Gregory; Zhou, Naidong; Scully, Ralph; Livingston, David M.
CORPORATE SOURCE: Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, 02115, USA
SOURCE: Proc. Natl. Acad. Sci. U. S. A. (1996), 93(20), 10626-10631
CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English
AB P300 and its family member, CREB-binding protein (CBP), function as key transcriptional coactivators by virtue of their interaction with the activated forms of certain transcription factors. In a search for addnl. cellular targets of p300/CBP, a protein-protein cloning strategy, surprisingly identified SRC-1, a coactivator involved in nuclear hormone receptor protein. P300 and SRC-1 interact, specifically, in vitro and they also form complexes in vivo. Moreover, we show that SRC-1 encodes a new member of the basic helix-loop-PAS domain family and that it phys. interacts with the retinoic acid receptor in response to hormone binding. Together, these results implicate p300 as a component of the retinoic acid signaling pathway, operating, in part, through specific interaction with a nuclear hormone receptor coactivator, SRC-1.
CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 6, 13
IT Ribonucleic acid formation factors
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)
(gene mSRC-1; sequence of **nuclear hormone receptor** coactivator protein SRC-1 which is a specific target of p300)
IT Gene, animal
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study);

PROC (Process)
(mSRC-1; sequence of **nuclear hormone receptor** coactivator protein SRC-1 and which which is a specific target of p300)
IT Protein sequences
(of **nuclear hormone receptor** coactivator protein SRC-1 which is a specific target of p300)
IT Proteins, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(p300; sequence of **nuclear hormone receptor** coactivator protein SRC-1 and which which is a specific target of p300)
IT Mouse
(sequence of **nuclear hormone receptor** coactivator protein SRC-1 which is a specific target of p300)
IT Deoxyribonucleic acid sequences
(complementary, for **nuclear hormone receptor** coactivator protein SRC-1 which is a specific target of p300)
IT **Receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(retinoic acid, **nuclear hormone receptor** coactivator protein SRC-1 interaction with retinoic acid **receptor** in response to **hormone** binding)
IT **183147-89-9**
RL: PRP (Properties)
(amino acid sequence; sequence of **nuclear hormone receptor** coactivator protein SRC-1 which is a specific target of p300)
IT 180009-17-0
RL: PRP (Properties)
(nucleotide sequence; sequence of **nuclear hormone receptor** coactivator protein SRC-1 which is a specific target of p300)

L11 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1996:444296 HCAPLUS
DOCUMENT NUMBER: 125:160156
TITLE: Molecular cloning and properties of a full-length putative thyroid hormone receptor coactivator
AUTHOR(S): Takeshita, Akira; Yen, Paul M.; Misiti, Silvia; Cardona, Guemalli R.; Liu, Ying; Chin, William W.
CORPORATE SOURCE: Div. Genetics, Brigham and Women's Hospital, Boston, MA, 02115, USA
SOURCE: Endocrinology (1996), 137(8), 3594-3597
CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Thyroid hormone receptors (TRs) are ligand-dependent transcription factors that regulate target gene transcription. The conserved carboxy-terminal region of the ligand-binding domain (AF-2) has been thought to play a crit. role in mediating ligand-dependent transactivation by the interaction with coactivator(s). Using bacterially-expressed TR as a probe, far-Western-based expression cDNA library screening identified cDNAs that encode, in part, the recently reported partial steroid receptor

coactivator-1 (SRC-1) sequence. Addnl. work, including 5' RACE, has characterized a full-length cDNA that encodes a .apprx.160 kD protein as a putative thyroid hormone receptor coactivator (F-SRC-1). In vitro binding studies show that F-SRC-1 binds to a variety of nuclear hormone receptors in a ligand-dependent manner, along with TBP and TFIIB, suggesting that F-SRC-1 may play as role as a bridging mol. between nuclear hormone receptors and general transcription factors. Interestingly, AF-2 mutants also retain ligand-dependent interaction with F-SRC-1. Although F-SRC-1 recognizes the ligand-induced conformational changes of nuclear hormone receptors, our observations suggest that F-SRC-1 may bind directly with subregion(s) in nuclear hormone receptors other than the AF-2 region.

CC 3-4 (Biochemical Genetics)
Section cross-reference(s): 2, 6

IT Estrogen **receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(F-SRC-1 binding to; cloning and sequence of putative **nuclear hormone receptor** coactivator F-SRC-1 of human)

IT **Receptors**
Retinoid **receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(RAR-.beta. (retinoic acid **receptor** .beta.), F-SRC-1 binding to; cloning and sequence of putative **nuclear hormone receptor** coactivator F-SRC-1 of human)

IT **Receptors**
Retinoid **receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(RXR.beta. (retinoid X **receptor** .beta.), F-SRC-1 binding to; cloning and sequence of putative **nuclear hormone receptor** coactivator F-SRC-1 of human)

IT **Receptors**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(estrogen, F-SRC-1 binding to; cloning and sequence of putative **nuclear hormone receptor** coactivator F-SRC-1 of human)

IT **180191-82-6**
RL: PRP (Properties)
(amino acid sequence; cloning and sequence of putative thyroid hormone receptor coactivator F-SRC-1 of human)

L11 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1994:647190 HCAPLUS
DOCUMENT NUMBER: 121:247190
TITLE: Identification of polypeptides that interact with **nuclear hormone receptors**
INVENTOR(S): Moore, David D.; Lee, Jae Won
PATENT ASSIGNEE(S): General Hospital Corp., USA
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9410338 A1 19940511 WO 1993-US10443 19931029
W: AU, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AU 9455890 A1 19940524 AU 1994-55890 19931029
AU 685412 B2 19980122
EP 666926 A1 19950816 EP 1994-901227 19931029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 08504325 T2 19960514 JP 1993-511358 19931029
PRIORITY APPLN. INFO.: US 1992-969136 19921030
WO 1993-US10443 19931029

AB A method for detg. whether a test protein is capable of interacting with a nuclear hormone receptor protein based on the in vivo interaction trap system is described. The method uses a host cell carrying a reporter gene under control of a protein binding site; a chimeric gene for a fusion protein of a nuclear hormone receptor and a binding moiety capable of specifically binding to the protein binding site; and a second chimeric gene for a fusion protein of the test protein covalently bonded to a weak gene activating moiety. The effect of the test protein on the level of expression of the reporter gene is detd.: if it increases expression of the reporter gene then this indicates its ability to interact with the nuclear hormone receptor protein. Such an interaction may be hormone dependent, hormone independent, or hormone sensitive. A no. of proteins interacting interacting with a thyroid hormone receptor were identified using a fusion protein of the receptor and the lexA protein and a fusion protein of the candidate with the weak B42 activation domain to activate expression of the LEU2 gene.

IC ICM C12Q001-00
ICS G01N033-53; A61K037-24; A61K037-36; C07K013-00
CC 2-1 (Mammalian Hormones)
Section cross-reference(s): 3, 9
ST **nuclear hormone receptor** binding protein assay

IT Gene, animal
RL: ANST (Analytical study)
(cDNA, for proteins interacting with **nuclear hormone receptors**, identification and cloning of)

IT **Hormone receptors**
Thyroid **hormone receptors**
RL: ANST (Analytical study)
(**nuclear**, peptides interacting with, methods for identification of, interaction trap system for)

IT Antibodies
RL: ANST (Analytical study)
(to polypeptides interacting with **nuclear** thyroid **hormone receptor**)

IT Gene
RL: ANST (Analytical study)
(chimeric, for **nuclear hormone receptors** and transcription activators, in identification of **receptor**-binding peptides)

IT **Receptors**
RL: ANST (Analytical study)
(**hormone, nuclear**, peptides interacting with, methods for identification of, interaction trap system for)

IT **Receptors**
RL: ANST (Analytical study)
(thyroid **hormone**, **nuclear**, peptides interacting
with, methods for identification of, interaction trap system for)
IT 158105-03-4, Thyroid hormone receptor-binding protein S309a-(human)
158105-04-5, Thyroid hormone receptor-binding protein S223a-fragment
(human) 158105-05-6, Thyroid hormone receptor-binding protein
S110a-fragment (human) 158124-33-5, Thyroid hormone receptor-binding
protein S110a-(human) 158163-11-2, Thyroid hormone receptor-binding
protein S101a (human) **158163-19-0**, Thyroid hormone
receptor-binding protein S205a (human) 158163-20-3, Thyroid hormone
receptor-binding protein S107a-(human) 158163-28-1 158163-29-2
158163-30-5 158708-22-6 158708-23-7 158708-24-8 158708-25-9
158708-26-0 158708-27-1 158708-28-2 158708-29-3 158708-30-6
158708-31-7 158708-32-8 158708-33-9 158708-34-0 158708-35-1
158708-36-2 158708-37-3 158708-38-4 158708-39-5 158708-40-8
RL: ANST (Analytical study)
(amino acid sequence of and cloning of cDNA for, interaction trap
system in)

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=> d l16 sqide 1-19 seqs from L10 & L11

L16 ANSWER 1 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **225916-33-6** REGISTRY
CN L-Aspartic acid, L-histidyl-L-glutaminyl-L-leucyl-L-leucyl-L-arginyl-L-
tyrosyl-L-leucyl-L-leucyl-L-.alpha.-aspartyl-L-lysyl- (9CI) (CA INDEX
NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 11

SEQ 1 HQLLRYLLDK D
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MF C64 H104 N18 O18
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.

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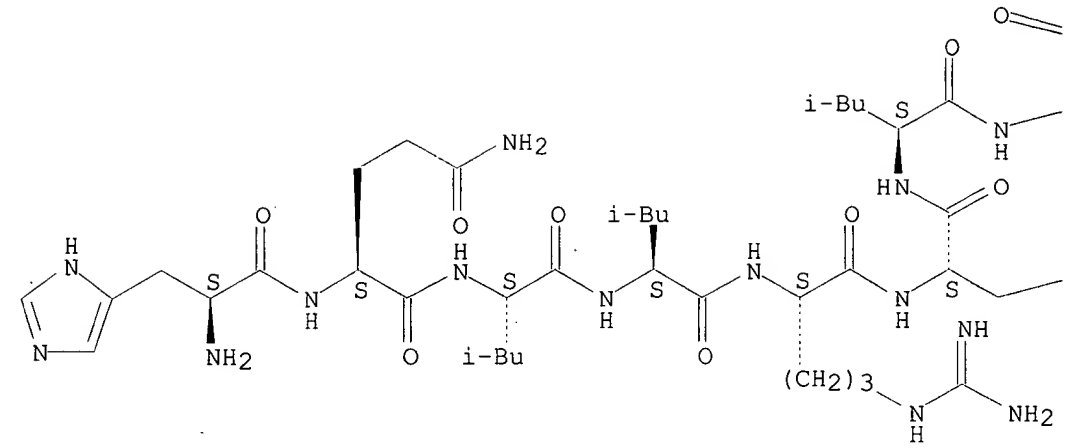

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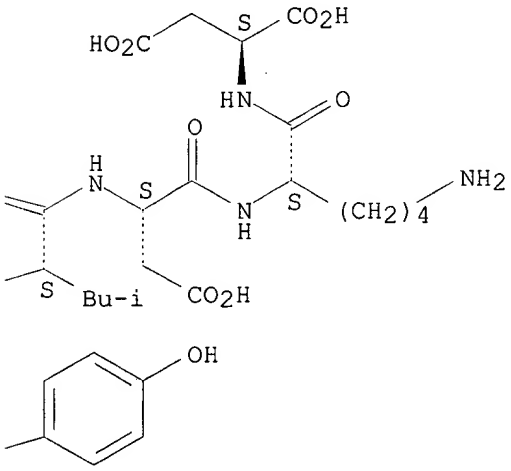

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16 ANSWER 2 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **218134-64-6** REGISTRY
CN 562-808-Transcription factor NCoA-2 (nuclear receptor co-activator 2) (mouse) (9CI) (CA INDEX NAME)

```
FS   PROTEIN SEQUENCE
SQL  247

SEQ      1 LQNSPVNMNP PPLSKMGSLD SKDCFGLYGE PSKGTTGQAE ASCHPKKQKG
        51 PNDSSMPQAA SGDRAEGHSR LHDSKGQTKL LQLLTTKSDQ MEPSPLPSSL
       101 SDTNKDSTGS LPGPGSTHGT SLKEKHKILH RLLQDSSSPV DLAKLTAEAT
       151 GKELSQESSS TAPGSEVTVK QEPASPKKKE NALLRYLLDK DDTKDIGLPE
                                                 ========
       201 ITPKLERLDS KTDPASNTKL IANKTVKEEV SFEPSDQPGS ELDNLEE
HITS AT:  183-190
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT
                1 REFERENCES IN FILE CA (1967 TO DATE)
                1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 3 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   218134-63-5  REGISTRY
CN   680-740-Transcription factor p/CIP (co-integrator-associated protein)
     (mouse) (9CI)  (CA INDEX NAME)
FS   PROTEIN SEQUENCE
SQL  161

SEQ      1 SNSRDPQVKK ESKESSGEVS ETPRGPLESK GHKKLLQLLT CSSDDRGHSS
        51 LTNSPLDPMC KDSSVSVTSP SGVSSSTSGT VSSTSNVRGS LLQEKMRILH
       101 KLLQNGNSPA EVAKITAEAT GKDTSSTASC GEGTTRQEQL SPKKKKNNAL
                                                               =
       151 LRYLLDRDDP S
           ======
HITS AT:  150-156
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT
                1 REFERENCES IN FILE CA (1967 TO DATE)
                1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 4 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   218134-62-4  REGISTRY
CN   591-803-Transcription factor p/CIP (co-integrator-associated protein)
     (mouse) (9CI)  (CA INDEX NAME)
FS   PROTEIN SEQUENCE
SQL  213

SEQ      1 SKESSGEVSE TPRGPLESKG HKKLLQLLTC SSDDRGHSSL TNSPLDPMCK
        51 DSSVSVTSPS GVSSSTSGTV SSTSNVRGSL LQEKMRILHK LLQNGNSPAE
       101 VAKITAEATG KDTSSTASCG EGTTRQEQLS PKKKKNNALL RYLLDRDDPS
                                                   == =====
       151 DVLAKELQPQ ADSGDSKLSQ CSCSTNPSSG QEKDPKIKTE TNDEVSGDLD
       201 NLDAILGDLT SSD
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MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT
                1 REFERENCES IN FILE CA (1967 TO DATE)
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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16 ANSWER 5 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **218134-59-9** REGISTRY
CN 78-1115-Transcription factor p/CIP (co-integrator-associated protein) (mouse) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 1038

SEQ
```
      1 RQIRQIKEQG KTISSDDDVQ KADVSSTGQG VIDKDSLGPL LLQALDGFLF
     51 VVNRDGNIVF VSKNVTQYLQ YKQEDLVNTS VYSILMEPRR KDFLNTYQNP
    101 QLMEFLGLMR TRDKKAPYIL IVRMLMKTHD ILKDVNASPE TRQRYETMQC
    151 FALSQPRAML EEGEDLQCCM ICVARRVTAP FPSSPESFIT RHDLSGKVVN
    201 IDTNSLRSSM RPGFEDIIRR CIQRFFSLND GQSWSQKRHY QEAYVHGHAE
    251 TPVYRFSLAD GTIVSAQTKS KLFRNPVTND RHGFISTHFL QREQNGYRPN
    301 PIPQDKGIRP PAAGCGVSMS PNQNVQMMGS RTYGVPDPSN TGQMGGARYG
    351 ASSSVASLTP GQSLQSPSSY QNSSYGLSMS SPPHGSPGLG PNQQNIMISP
    401 RNRGSPKNAS HQFSPAAGAH SPMGPSGNTG SHSFSSSSLS ALQAISEGVG
    451 TSLLSTLSSP GPKLDNSPNM NISQPSKVSG QDSKSPLGLY CEQNPVESSV
    501 CQSNSRDPQV KKESKESSGE VSETPRGPLE SKGHKKLLQL LTCSSDDRGH
    551 SSLTNSPLDP MCKDSSVSVT SPSGVSSSTS GTVSSTSNVR GSLLQEKMRI
    601 LHKLLQNGNS PAEVAKITAE ATGKDTSSTA SCGEGTTRQE QLSPKKKKNN
    651 ALLRYLLDRD DPSDVLAKEL QPQADSGDSK LSQCSCSTNP SSGQEKDPKI
          =======
    701 KTETNDEVSG DLDNLDAILG DLTSSDFYNN PTNGGHPGAK QQMFAGPSSL
    751 GLRSPQFVQS VRPPYNRAVS LDSPVSVGSG PPVKNVSAFP GLPKQPILAG
    801 NFRMMDSQKN YGANNGPNRN VPVNPTSSPG DWGLANSRAS RMEPLASSPL
    851 GRTGADYSAT LPRPAHGGSV PTLPLRSNRL PGARPSLQQQ QQQQQQQQQQ
    901 QQQQQQQQQQ MLQMRTGEIP MGMGVNPYSP AVQSNQPGSW PEGMLSMEQG
    951 PHGSQNRPLL RNSLDDLLGP PSNAEGQSDE RALLDQLHTF LSNTDATGLE
   1001 EIDRALGIPE LVNQGQALES KQDVFQGQEA AVMMDQKA
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HITS AT: 652-658
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXLIT
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16 ANSWER 6 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **216067-47-9** REGISTRY
CN Transcription factor TIF2 (rat reduced) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Coactivator TIF2 (rat reduced)
FS PROTEIN SEQUENCE
SQL 1465

SEQ
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      1 MSGMGENTSD PSRAETRKRK ECPDQLGPSP KRSTEKRNRE QENKYIEELA
     51 ELIFANFNDI DNFNFKPDKC AILKETVKQI RQIKEQEKAA AANIDEVQKS
    101 DVSSTGQGVI DKDALGPMML EALDGFFFVV NLEGNVVFVS ENVTQYLRYN
    151 QEELMNKSVY SILHVGDHTE FVKNLLPKSM VNGGSWTGEP PRRNSHTFNC
    201 RMLVKPLPDS EEEGHDNQEA HQKYETMQCF AVSQPKSIKE EGEDKQSCLI
    251 CVARRVPMKE RPALPSSESF TTRQDLQGKI TFLDTSTMRD AMKPGWEDLV
    301 RRCIQKFHTQ HEGESLSYAK RHHHEVLRQG LAFSQIYRFS LSDGTLVAAQ
    351 TKSKLIRSQT TNEPQLVISI HMLHREQNVC VMNPDLTGQA MGKPLSPMSS
    401 SSPARQAMCS GNPGQDVALG SNMNFPMNGP REQMSMPMGR FGGSGGMNHV
    451 SGMQATTPQG SNYALKMNSP SQSSPGLNPG QPSSVLSPRH RMSPGVAGSP
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```
       501 RVPPSQFSPA GSLHSPAGVC SSTGNSHSYT NSSLNALQAL SEGHGVSLGP
       551 SLASPDLKMG NSQNSPVNMN PPPLSKMGSL DSKDCFGLYG EPSEGTTGQA
       601 QASCHPEEQK RPNDSSMPQA ASEDRAEGHS RLHESKGQTK LLQLLTTKSD
       651 QMEPSPLPSS LSDTNKDSTG SLPGPGSTHG TSLKEKHKIL HRLLQDSSSP
       701 VDLAKLTAEA TGKELNQESS GTAPGSEVTV KQEPASPKKK ENALLRYLLD
                                                   =======
       751 KDDTKDIGLP EITPKLERLD SKTDPASNTK LIAMKTVKEE VSFEPSDQPG
           =
       801 SELDNLEEIL DDLQNSQLPQ LFPDTRPGAP TGSVDKQAII NDLMQLTADS
       851 SPVTPVGAQK AALRMSQSTF NNPRPGQLGR LLPNQNLPLD ITLQSPTGAG
       901 PFPPIRNSSP YSVIPQPGMM GNQGMLGSQG NLGNNSTGMI GSSTSRSSMP
       951 SGEWAPQSPA VRVTCAATTG AMNRPIQGGM IRNPTASIPM RANSQPGQRQ
      1001 MLQPQVMNIG PSELEMNMGG PQYNQQQAPP NQTAPWPESI LPIDQASFGS
      1051 QNRHPFGSSP DDLLCPHPAA ESPSDEGALL DQLYLALRNF DGLEEIDRAL
      1101 GIPELVSQSQ AVDPEQFSSQ ESSMMLEQKP PVFPQQYASQ TQMAQGSYNP
      1151 MQDPNFHTMG QRPNYTTLRM QPRPGLRPTG IVQNQPNQLR LQLQHRLQAQ
      1201 QNRQPLMNQI SGVSNVNLTL RPGVPTQAPI NAQMLAQRQR EILNQHLRQR
      1251 QMHQQQQVQQ RTLMMRGQGL NMTPSMVAPT GLPAAMSNPR IPQANAQQFP
      1301 FPPNYGISQQ PDPGFTGATT PQSPLMSPRM AHTQSPMMQQ SQANPAYQPA
      1351 SDINGWAQGS MGGNSMFSQQ SPPHFGQQAN TSMYNNNMNI NVSMATNTAG
      1401 LSNMNQMTGQ MSMTSVTSVP TSGLSSMGPE QVNDPALRGS SLFTTNQLPG
      1451 MDMIKQEGDG SRKYC
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SR   CA
LC   STN Files:   CA, CAPLUS
                1 REFERENCES IN FILE CA (1967 TO DATE)
                1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 7 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   215598-57-5  REGISTRY
CN   L-Threonine, L-prolyl-L-glutaminyl-L-alanyl-L-glutaminyl-L-glutaminyl-L-
     lysyl-L-seryl-L-leucyl-L-leucyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-
     leucyl- (9CI)  (CA INDEX NAME)
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  14

SEQ      1 PQAQQKSLLQ QLLT
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SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT

Absolute stereochemistry.
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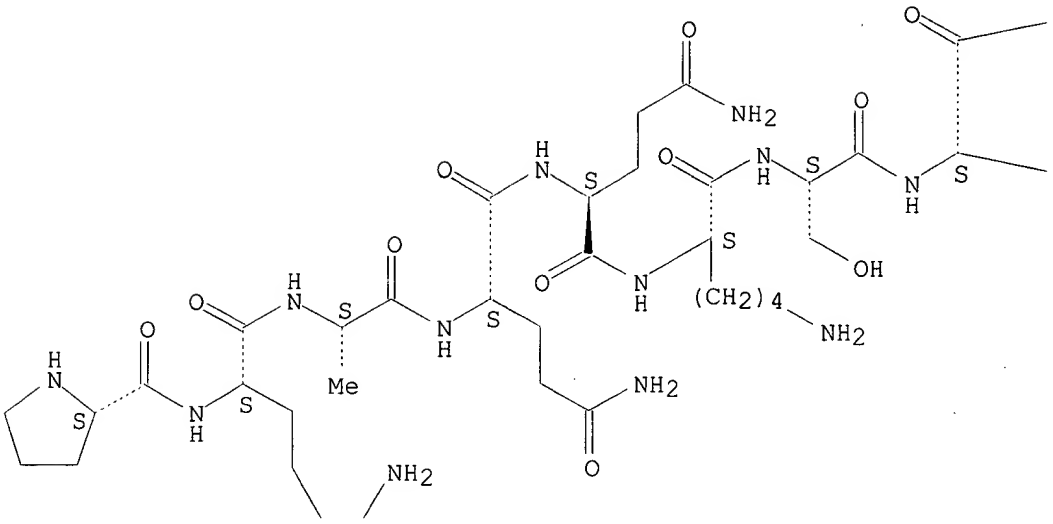
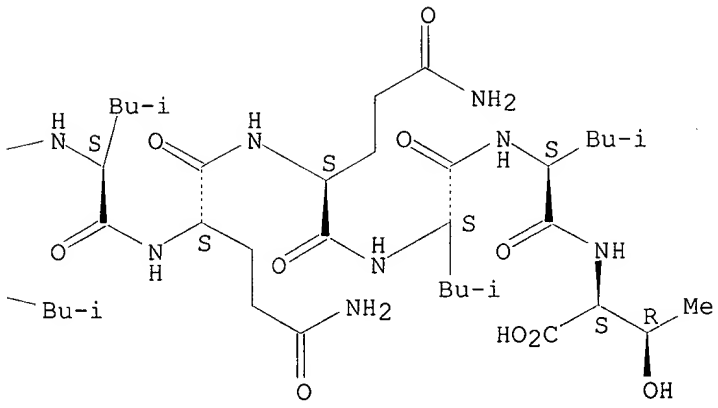


PAGE 1-B



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2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16 ANSWER 8 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **202486-20-2** REGISTRY
CN 624-869-Transcriptional intermediary factor TIF-2 (human) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 246

SEQ 1 ERADGQSRLH DSKGQTKLLQ LLTTKSDQME PSPLASSLSD TNKDSTGSLP
51 GSGSTHGTSL KEKHKILHRL LQDSSSPVDL AKLTAEATGK DLSQESSSTA
101 PGSEVTIKQE PVSPKKKENA LLRYLLDKDD TKDIGLPEIT PKLERLDSKT
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151 DPASNTKLIA MKTEKEEMSF EPGDQPGSEL DNLEEILDDL QNSQLPQLFP
201 DTRPGAPAGS VDKQAIINDL MQLTAENSPV TPVGAQKTAL RISQST

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MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXLIT
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16 ANSWER 9 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **202486-19-9** REGISTRY
CN 624-1010-Transcriptional intermediary factor TIF-2 (human) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 387

SEQ 1 ERADGQSRLH DSKGQTKLLQ LLTTKSDQME PSPLASSLSD TNKDSTGSLP
51 GSGSTHGTSL KEKHKILHRL LQDSSSPVDL AKLTAEATGK DLSQESSSTA
101 PGSEVTIKQE PVSPKKKENA LLRYLLDKDD TKDIGLPEIT PKLERLDSKT
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151 DPASNTKLIA MKTEKEEMSF EPGDQPGSEL DNLEEILDDL QNSQLPQLFP
201 DTRPGAPAGS VDKQAIINDL MQLTAENSPV TPVGAQKTAL RISQSTFNNP
251 RPGQLGRLLP NQNLPLDITL QSPTGAGPFP PIRNSSPYSV IPQPGMMGNQ
301 GMIGNQGNLG NSSTGMIGNS ASRPTMPSGE WAPQSSAVRV TCAATTSAMN
351 RPVQGGMIRN PAASIPMRPS SQPGQRQTLQ SQVMNIG

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CI MAN
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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16 ANSWER 10 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **202486-18-8** REGISTRY
CN 624-1179-Transcriptional intermediary factor TIF-2 (human) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 556

SEQ 1 ERADGQSRLH DSKGQTKLLQ LLTTKSDQME PSPLASSLSD TNKDSTGSLP

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         51 GSGSTHGTSL KEKHKILHRL LQDSSSPVDL AKLTAEATGK DLSQESSSTA
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                                 ========
        151 DPASNTKLIA MKTEKEEMSF EPGDQPGSEL DNLEEILDDL QNSQLPQLFP
        201 DTRPGAPAGS VDKQAIINDL MQLTAENSPV TPVGAQKTAL RISQSTFNNP
        251 RPGQLGRLLP NQNLPLDITL QSPTGAGPFP PIRNSSPYSV IPQPGMMGNQ
        301 GMIGNQGNLG NSSTGMIGNS ASRPTMPSGE WAPQSSAVRV TCAATTSAMN
        351 RPVQGGMIRN PAASIPMRPS SQPGQRQTLQ SQVMNIGPSE LEMNMGGPQY
        401 SQQQAPPNQT APWPESILPI DQASFASQNR QPFGSSPDDL LCPHPAAESP
        451 SDEGALLDQL YLALRNFDGL EEIDRALGIP ELVSQSQAVD PEQFSSQDSN
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        551 PGLRPT
HITS AT:   121-128
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CI   MAN
SR   CA
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                1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 11 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   202486-16-6  REGISTRY
CN   624-1287-Transcriptional intermediary factor TIF-2 (human) (9CI)  (CA
     INDEX NAME)
FS   PROTEIN SEQUENCE
SQL  664

SEQ      1 ERADGQSRLH DSKGQTKLLQ LLTTKSDQME PSPLASSLSD TNKDSTGSLP
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        101 PGSEVTIKQE PVSPKKKENA LLRYLLDKDD TKDIGLPEIT PKLERLDSKT
                                 ========
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        201 DTRPGAPAGS VDKQAIINDL MQLTAENSPV TPVGAQKTAL RISQSTFNNP
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        351 RPVQGGMIRN PAASIPMRPS SQPGQRQTLQ SQVMNIGPSE LEMNMGGPQY
        401 SQQQAPPNQT APWPESILPI DQASFASQNR QPFGSSPDDL LCPHPAAESP
        451 SDEGALLDQL YLALRNFDGL EEIDRALGIP ELVSQSQAVD PEQFSSQDSN
        501 IMLEQKAPVF PQQYASQAQM AQGSYSPMQD PNFHTMGQRP SYATLRMQPR
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L16  ANSWER 12 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   202486-14-4  REGISTRY
CN   624-1131-Transcriptional intermediary factor TIF-2 (human) (9CI)  (CA
     INDEX NAME)
FS   PROTEIN SEQUENCE
SQL  508
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         101 PGSEVTIKQE PVSPKKKENA LLRYLLDKDD TKDIGLPEIT PKLERLDSKT
                                  ========
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         301 GMIGNQGNLG NSSTGMIGNS ASRPTMPSGE WAPQSSAVRV TCAATTSAMN
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HITS AT:   121-128
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SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT
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                1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 13 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   202486-13-3  REGISTRY
CN   Transcriptional intermediary factor TIF-2 (human) (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   GenBank X97674-derived protein GI 1877215
FS   PROTEIN SEQUENCE
SQL  1464

SEQ      1 MSGMGENTSD PSRAETRKRK ECPDQLGPSP KRNTEKRNRE QENKYIEELA
          51 ELIFANFNDI DNFNFKPDKC AILKETVKQI RQIKEQEKAA AANIDEVQKS
         101 DVSSTGQGVI DKDALGPMML EALDGFFFVV NLEGNVVFVS ENVTQYLRYN
         151 QEELMNKSVY SILHVGDHTE FVKNLLPKSI VNGGSWSGEP PRRNSHTFNC
         201 RMLVKPLPDS EEEGHDNQEA HQKYETMQCF AVSQPKSIKE EGEDLQSCLI
         251 CVARRVPMKE RPVLPSSESF TTRQDLQGKI TSLDTSTMRA AMKPGWEDLV
         301 RRCIQKFHAQ HEGESVSYAK RHHHEVLRQG LAFSQIYRFS LSDGTLVAAQ
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         601 ESSCHPGEQK ETNDPNLPPA VSSERADGQS RLHDSKGQTK LLQLLTTKSD
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         901 PFPPIRNSSP YSVIPQPGMM GNQGMIGNQG NLGNSSTGMI GNSASRPTMP
         951 SGEWAPQSSA VRVTCAATTS AMNRPVQGGM IRNPAASIPM RPSSQPGQRQ
        1001 TLQSQVMNIG PSELEMNMGG PQYSQQQAPP NQTAPWPESI LPIDQASFAS
        1051 QNRQPFGSSP DDLLCPHPAA ESPSDEGALL DQLYLALRNF DGLEEIDRAL
        1101 GIPELVSQSQ AVDPEQFSSQ DSNIMLEQKA PVFPQQYASQ AQMAQGSYSP
        1151 MQDPNFHTMG QRPSYATLRM QPRPGLRPTG LVQNQPNQLR LQLQHRLQAQ
        1201 QNRQPLMNQI SNVSNVNLTL RPGVPTQAPI NAQMLAQRQR EILNQHLRQR
        1251 QMHQQQQVQQ RTLMMRGQGL NMTPSMVAPS GMPATMSNPR IPQANAQQFP
        1301 FPPNYGISQQ PDPGFTGATT PQSPLMSPRM AHTQSPMMQQ SQANPAYQAP
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HITS AT:   744-751
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT
               1 REFERENCES IN FILE CA (1967 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 14 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   200222-66-8  REGISTRY
CN   Transcription factor TRAM-1 (thyroid hormone receptor activator molecule
     1) (human) (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   GenBank AF016031-derived protein GI 2584880
FS   PROTEIN SEQUENCE
SQL  1424

SEQ      1 MSGLGENLDP LASDSRKRKL PCDTPGQGLT CSGEKRRREQ ESKYIEELAE
        51 LISANLSDID NFNVKPDKCA ILKETVRQIR QIKEQGKTIS NDDDVQKADV
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       151 DLVNTSVYNI LHEEDRKDFL KNLPKSTVNG VSWTNETQRQ KSHTFNCRML
       201 MKTPHDILED INASPEMRQR YETMQCFALS QPRAMMEEGE DLQSCMICVA
       251 RRITTGERTF PSNPESFITR HDLSGKVVNI DTNSLRSSMR PGFEDIIRRC
       301 IQRFFSLNDG QSWSQKRHYQ EAYLNGHAET PVYRFSLADG TIVTAQTKSK
       351 LFRNPVTNDR HGFVSTHFLQ REQNGYRPNP NPVGQGIRPP MAGCNSSVGG
       401 MSMSPNQGLQ MPSSRAYGLA DPSTTGQMSG ARYGGSSNIA SLTPGPGMQS
       451 PSSYQNNNYG LNMSSPPHGS PGLAPNQQNI MISPRNRGSP KIASHQFSPV
       501 AGVHSPMASS GNTGNHSFSS SSLSALQAIS EGVGTSLLST LSSPGPKLDN
       551 SPNMNITQPS KVSNQDSKSP LGFYCDQNPV ESSMCQSNSR DHLSDKESKE
       601 SSVEGAENQR GPLESKGHKK LLQLLTCSSD DRGHSSLTNS PLDSSCKESS
       651 VSVTSPSGVS SSTSGGVSST SNMHGSLLQE KHRILHKLLQ NGNSPAEVAK
       701 ITAEATGKDT SSITSCGDGN VVKQEQLSPK KKENNALLRY LLDRDDPSDA
                                                   ==== ===
       751 LSKELQPQVE GVDNKMSQCT SSTIPSSSQE KDPKIKTETS EEGSGDLDNL
       801 DAILGDLTSS DFYNNSISSN GSHLGTKQQV FQGTNSLGLK SSQSVQSIRP
       851 PYNRAVSLDS PVSVGSSPPV KNISAFPMLP KQPMLGGNPR MMDSQENYGS
       901 SMGGPNRNVT VTQTPSSGDW GLPNSKAGRM EPMNSNSMGR PGGDYNTSLP
       951 RPALGGSIPT LPLRSNSIPG ARPVLQQQQQ MLQMRPGEIP MGMGANPYGQ
      1001 AAASNQLGSW PDGMLSMEQV SHGTQNRPLL RNSLDDLVGP PSNLEGQSDE
      1051 RALLDQLHTL LSNTDATGLE EIDRALGIPE LVNQGQALEP KQDAFQGQEA
      1101 AVMMDQKAGL YGQTYPAQGP PMQGGFHLQG QSPSFNSMMN QMNQQGNFPL
      1151 QGMHPRANIM RPRTNTPKQL RMQLQQRLQG QQFLNQSRQA LELKMENPTA
      1201 GGAAVMRPMM QPQVSSQQGF LNAQMVAQRS RELLSHHFRQ QRVAMMMQQQ
      1251 QQQQQQQQQQ QQQQQQQQQQ QQQQQQTQAF SPPPNVTASP SMDGLLAGPT
      1301 MPQAPPQQFP YQPNYGMGQQ PDPAFGRVSS PPNAMMSSRM GPSQNPMMQH
      1351 PQAASIYQSS EMKGWPSGNL ARNSSFSQQQ FAHQGNPAVY SMVHMNGSSG
      1401 HMGQMNMNPM PMSGMPMGPD QKYC
HITS AT:   737-743
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS
               1 REFERENCES IN FILE CA (1967 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1967 TO DATE)
```

L16 ANSWER 15 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **193488-34-5** REGISTRY
CN Transcription factor NCoA-2 (nuclear receptor coactivator 2) (mouse) (9CI)
(CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 1463

SEQ
1 MSGNGENTSD FSRAETRKRK ECPDQLGPSP KRSTEKRNRE QENKYIEELA
51 ELIFANFNDI DNFNFKPDKC AILKETVKQI RQIKEQEKAA AANIDEVQKS
101 DVSSTGQGVI DKDALGPMML EALDGFFFVV NLEGSVVFVF RNVTQYLRYN
151 QEELMNKSVY SILHVGDHTE FVKNLLPKSM VNGGSWSGEP PRRSSHTFNC
201 RMLVKPLPDS EEEGHDSQEA HQKYEAMQCF AVSQPKSIKE EGEDLQSCLI
251 VWHEDPHEGK TNSSLIRKLY HPPGPPRQDH FTGHYHHESR HEAGLGRSGK
301 KDAFRSSTHS MKGSLYHMPR RHHHEVLRQG LAFSQIYRFS LSDGTLVAAQ
351 TKSKLIRSQT TNEPQLVISL HMLHREQNVC VMNPDLTGQA MGKPLNPISS
401 SSPAHQALCS GNPGQDWTLS SNINFPMNGP KIQMGMPMGR FGGSGGMNHV
451 SGMQATTPQG SNYALKNNSP SQSSFGMNPG QASSVLSPRQ RMSPGVAGSP
501 RIFFSQFSPA GNLHSPVGVC SSTGNSHSYT NSSLNALQAL SEGHGVSLGS
551 SLASPDLKMG NLQNSPVNMN PPPLSKMGSL DSKDCFGLYG EPSKGTTGQA
601 EASCHPKKQK GPNDSSMPQA ASGDRAEGHS RLHDSKGQTK LLQLLTTKSD
651 QMEPSPLPSS LSDTNKDSTG SLPGPGSTHG TSLKEKHKIL HRLLQDSSSP
701 VDLAKLTAEA TGKELSQESS STAPGSEVTV KQEPASPKKK ENALLRYLLD
=======
751 KDDTKDIGLP EITPKLERLD SKTDPASNTK LIANKTVKEE VSFEPSDQPG
=
801 SELDNLEEIL DDLQNSQLPQ LFPDTRPQAP TGSVDKQAII NDLMQLTADS
851 SPVPPAGAQK AALCMSQSSF NNPRPGQLGR LLPYQNLPLD ITLQSPTGAG
901 PFPPIRNSSP YSVIPQFGMN GNQGMLGSQG NLGNNSTGMI GSSTSRPSMP
951 SGEWAPQSTS CESTLVLLPL VPRTDQSKEA RFGNFTASIP MGANSQLGQR
1001 QMLQSQVMNI GPSELEMNMG GPQYNQQQAP PNQTAPWPES ILPIDQASFA
1051 SQNRQPFGSS PDDLLCPHPA AESPSDEGAL LDQLYLALRN FDGLEEIDRA
1101 LGIPELVSQS QAVDAEQFSS QESSIMLEQK PPVFPQQYAS QAQMAQGGYN
1151 PNQDFNFHTM GQRPNYTTLR MQPRPGLRPT GIVQNQPNQL RLQLQHRLQA
1201 QQNRQPLMNQ ISSVSNVNLT LRFGVPTQAP INAQMLAQRQ REILNQHLRQ
1251 RQMQQQVQQR TLMMRGQGLN VTPSMVAPAG LPAAMSNPRI PQANAQQFPF
1301 PPNYGISQQP DPGFTGATTP QSPLMSPRNA HTQSPMWQQS QANPAYQPTS
1351 DNNGWAQGSN GGNSNPSQQS PPHFGQQANT SMYSNNMNIS VSMATNTGGL
1401 SSMNQMTGQM SMTSVTSVPT SGLPSMGPEQ VNDPALRGGN LFPNQLLGMD
1451 MIKQEGDASR KYC

HITS AT: 744-751
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXLIT
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16 ANSWER 16 OF 19 REGISTRY COPYRIGHT 2000 ACS
RN **193488-33-4** REGISTRY
CN Transcription factor p/CIP (co-integrator-associated protein) (mouse) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 1402

SEQ
1 MSGLGESSLD PLAAESRKRK LPCDAPGQGL VYSGEKWRRE QESKYIKKLA

```
         51 ELISANLSDI DNFNVKPDKC AILKETVRQI RQIKEQGKTI SSDDDVQKAD
        101 VSSTGQGVID KDSLGPLLLQ ALDGFLFVVN RDGNIVFVSK NVTQYLQYKQ
        151 EDLVNTSVYS ILMEPRRKDF LNTYQNPQLM EFLGLMRTRD KKAPYILIVR
        201 MLMKTHDILK DVNASPETRQ RYETMQCFAL SQPRAMLEEG EDLQCCMICV
        251 ARRVTAPFPS SPESFITRHD LSGKVVNIDT NSLRSSMRPG FEDIIRRCIQ
        301 RFFSLNDGQS WSQKRHYQEA YVHGHAETPV YRFSLADGTI VSAQTKSKLF
        351 RNPVTNDRHG FISTHFLQRE QNGYRPNPIP QDKGIRPPAA GCGVSMSPNQ
        401 NVQMMGSRTY GVPDPSNTGQ MGGARYGASS SVASLTPGQS LQSPSSYQNS
        451 SYGLSMSSPP HGSPGLGPNQ QNIMISPRNR GSPKNASHQF SPAAGAHSPM
        501 GPSGNTGSHS FSSSSLSALQ AISEGVGTSL LSTLSSPGPK LDNSPNMNIS
        551 QPSKVSGQDS KSPLGLYCEQ NPVESSVCQS NSRDPQVKKE SKESSGEVSE
        601 TPRGPLESKG HKKLLQLLTC SSDDRGHSSL TNSPLDPMCK DSSVSVTSPS
        651 GVSSSTSGTV SSTSNVRGSL LQEKMRILHK LLQNGNSPAE VAKITAEATG
        701 KDTSSTASCG EGTTRQEQLS PKKKKNNALL RYLLDRDDPS DVLAKELQPQ
                                        == =====
        751 ADSGDSKLSQ CSCSTNPSSG QEKDPKIKTE TNDEVSGDLD NLDAILGDLT
        801 SSDFYNNPTN GGHPGAKQQM FAGPSSLGLR SPQFVQSVRP PYNRAVSLDS
        851 PVSVGSGPPV KNVSAFPGLP KQPILAGNFR MMDSQKNYGA NNGPNRNVPV
        901 NPTSSPGDWG LANSRASRME PLASSPLGRT GADYSATLPR PAHGGSVPTL
        951 PLRSNRLPGA RPSLQQQQQQ QQQQQQQQQQ QQQQQQQMLQ MRTGEIPMGM
       1001 GVNPYSPAVQ SNQPGSWPEG MLSMEQGPHG SQNRPLLRNS LDDLLGPPSN
       1051 AEGQSDERAL LDQLHTFLSN TDATGLEEID RALGIPELVN QGQALESKQD
       1101 VFQGQEAAVM MDQKAALYGQ TYPAQGPPLQ GQFNLQGQSP SFNSMMGQIS
       1151 QQGSFPLQGM HPRAGLVRPR TNTPKQLRMQ LQQRLQGQQF LNQSRQALKM
       1201 KMENPAGTAV MRPMMPQAFF NAQMAAQQKR KLMSHHLQQQ RMAAMMSQPQ
       1251 PQAFSPPPNV TASPSMDGVL AGSANPQAPP QQFPYPANYG TGQPPVASLW
       1301 SRLESSQCND VIKNGAFFEC HGAASSAHTH VSAFRYEGVA VREPGQEWLL
       1351 PPAAVCSPGE PCSLQHGAYE QQRWALGTDG HDPHAHVWHA NGPRSEILLT
       1401 SP
HITS AT:   729-735
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT
               2 REFERENCES IN FILE CA (1967 TO DATE)
               2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 17 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   183147-89-9  REGISTRY
CN   RNA formation factor (mouse gene mSRC-1) (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Ribonucleic acid formation factor (mouse gene mSRC-1)
OTHER NAMES:
CN   GenBank U64828-derived protein GI 1490876
CN   Protein SRC-1 (mouse steroid receptor coactivator-1 gene mSRC-1)
FS   PROTEIN SEQUENCE
SQL  1405

SEQ      1 MSGLGDSSSD PANPDSHKRK GSPCDTLASS TEKRRREQEN KYLEELAELL
         51 SANISDIDSL SVKPDKCKIL KKTVDQIQLM KRMEQEKSTT DDDVQKSDIS
        101 SSSQGVIEKE SLGPLLLEAL DGFFFVVNCE GRIVFVSENV TSYLGYNQEE
        151 LMNTSVYSIL HVGDHAEFVK NLLPKSLVNG VPWPQEATRR NSHTFNCRML
        201 IHPPEDPGTE NQEACQRYEV MQCFTVSQPK SIQEDGEDFQ SCLICIARRL
        251 PRPPAITGVE SFMTKQDTTG KIISIDTSSL RAAGRTGWED LVRKCIYAFF
        301 QPQGREPSYA RQLFQEVMTR GTASSPSYRF ILNDGTMLSA HTKCKLCYPQ
        351 SPDMQPFIMG IHIIDREHSG LSPQDDSNSG MSIPRINPSV NPGISPAHGV
        401 TRSSTLPPSN NNMVSARVNR QQSSDLNSSS SHTNSSNNQG NFGCSPGNQI
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         451 VANVALNQGQ AGSQSSNPSL NLNNSPMEGT GIALSQFMSP RRQANSGLAT
         501 RARMSNNSFP PNIPTLSSPV GITSGACNNN NRSYSNIPVT SLQGMNEGPN
         551 NSVGFSAGSP VLRQMSSQNS PSRLSMQPAK AESKDSKEIA SILNEMIQSD
         601 NSDNSANEGK PLDSGLLHNN DRLSEGDSKY SQTSHKLVQL LTTTAEQQLR
                                                 ===== ====
         651 HADIDTSCKD VLSCTGTSSS ASSNPSGGTC PSSHSSLTER HKILHRLLQE
                                                       ========
         701 GSPSDITTLS VEPEKKDSVP ASTAVSVSGQ SQGSASIKLE LDAAKKKESK
         751 DHQLLRYLLD KDEKDLRSTP NLCLDDVKVK VEKKEQMDPC NTNPTPMTKP
              ========= ==
         801 APEEVKLESQ SQFTADLDQF DQLLPTLEKA AQLPSLCETD RMDGAVTGVS
         851 IKAEVLPASL QPTTARAAPR LSRLPELELE AIDNQFGQPG AGDQIPWANN
         901 TLTTINQNKP EDQCISSQLD ELLCPPTTVE GRNDEKALLE QLVSFLSGKD
         951 ETELAELDRA LGIDKLVQGG GLDVLSERFP PQQATPPLMM EDRPTLYSQP
        1001 YSSPSPTAGL SGPFQGMVRQ KPSLGAMPVQ VTPPRGTFSP NMGMQPRQTL
        1051 NRPPAAPNQL RLQLQQRLQG QQQLMHQNRQ AILNQFAANA PVGMNMRSGM
        1101 QQQITPQPPL NAQMLAQRQR ELYSQQHRQR QIIQQQRAML MRHQSFGNNI
        1151 PPSSGLPVQM GTPRLPQGAP QQFPYPPNYG TNPGTPPAST SPFSQLAANP
        1201 EASLATRSSM VNRGMAGNMG GQFGAGISPQ MQQNVFQYPG PGLVPQGEAT
        1251 FAPSLSPGSS MVPMPVPPPQ SSLLQQTPPT SGYQSPDMKA WQQGTMGNNN
        1301 VFSQAVQSQP APAQPGVYNN MSITVSMAGG NANIQNMNPM MGQMQMSSLQ
        1351 MPGMNTVCSE QMNDPALRHT GLYCNQLSST DLLKTDADGN QDKKTEEFFS
        1401 VVTTD
HITS AT:   636-644, 693-700, 752-762
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT
                1 REFERENCES IN FILE CA (1967 TO DATE)
                1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 18 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   180191-82-6  REGISTRY
CN   RNA formation factor F-SRC 1 (human HeLa cell reduced) (9CI)  (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
CN   Ribonucleic acid formation factor F-SRC 1 (human HeLa cell reduced)
OTHER NAMES:
CN   GenBank U59302-derived protein GI 1480646
CN   Nuclear hormone receptor coactivator protein F-SRC-1 (human HeLa cell
     reduced)
FS   PROTEIN SEQUENCE
SQL  1440

SEQ      1 MSGLGDSSSD PANPDSHKRK GSPCDTLASS TEKRRREQEN KYLEELAELL
          51 SANISDIDSL SVKPDKCKIL KKTVDQIQLM KRMEQEKSTT DDDVQKSDIS
         101 SSSQGVIEKE SLGPLLLEAL DGFFFVVNCE GRIVFVSENV TSYLGYNQEE
         151 LMNTSVYSIL HVGDHAEFVK NLLPKSLVNG VPWPQEATRR NSHTFNCRML
         201 IHPPDEPGTE NQEACQRYEV MQCFTVSQPK SIQEDGEDFQ SCLICIARRL
         251 PRPPAITGVE SFMTKQDTTG KIISIDTSSL RAAGRTGWED LVRKCIYAFF
         301 QPQGREPSYA RQLFQEVMTR GTASSPSYRF ILNDGTMLSA HTKCKLCYPQ
         351 SPDMQPFIMG IHIIDREHSG LSPQDDTNSG MSIPRVNPSV NPSISPAHGV
         401 ARSSTLPPSN SNMVSTRINR QQSSDLHSSS HSNSSNSQGS FGCSPGSQIV
         451 ANVALNQGQA SSQSSNPSLN LNNSPMEGTG ISLAQFMSPR RQVTSGLATR
         501 PRMPNNSFPP NISTLSSPVG MTSSACNNNN RSYSNIPVTS LQGMNEGPNN
         551 SVGFSASSPV LRQMSSQNSP SRLNIQPAKA ESKDNKEIAS ILNEMIQSDN
         601 SSSDGKPLDS GLLHNNDRLS DGDSKYSQTS HKLVQLLTTT AEQQLRHADI
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                                                  =========
       651 DTSCKDVLSC TGTSNSASAN SSGGSCPSSH SSLTERHKIL HRLLQEGSPS
                                                       == ======
       701 DITTLSVEPD KKDSASTSVS VTGQVQGNSS IKLELDASKK KESKDHQLLR
                                                             =====
       751 YLLDKDEKDL RSTPNLSLDD VKVKVEKKEQ MDPCNTNPTP MTKPTPEEIK
           ======
       801 LEAQSQFTAD LDQFDQLLPT LEKAAQLPGL CETDRMDGAV TSVTIKSEIL
       851 PASLQSATAR PTSRLNRLPE LELEAIDNQF GQPGTGDQIP WTNNTVTAIN
       901 QSKSEDQCIS SQLDELLCPP TTVEGRNDEK ALLEQLVSFL SGKDETELAE
       951 LDRALGIDKL VQGGGLDVLS ERFPPQQATP PLIMEERPNL YSQPYSSPSP
      1001 TANLPSPFQG MVRQKPSLGT MPVQVTPPRG AFSPGMGMQP RQTLNRPPAA
      1051 PNQLRLQLQQ RLQGQQQLIH QNRQAILNQF AATAPVGINM RSGMQQQITP
      1101 QPPLNAQMLA QRQRELYSQQ HRQRQLIQQQ RAMLMRQQSF GNNLPPSSGL
      1151 PVQMGNPRLP QGAPQQFPYP PNYGTNPGTP PASTSPFSQL AANPEASLAN
      1201 RNSMVSRGMT GNIGGQFGTG INPQMQQNVF QYPGAGMVPQ GEANFAPSLS
      1251 PGSSMVPMPI PPPQSSLLQQ TPPASGYQSP DMKAWQQGAI GNNNVFSQAV
      1301 QNQPTPAQPG VYNNMSITVS MAGGNTNVQN MNPMMAQMQM SSLQMPGMNT
      1351 VCPEQINDPA LRHTGLYCNQ LSSTDLLKTE ADGTQVQQVQ VFADVQCTVN
      1401 LVGGDPYLNQ PGPLGTQKPT SGPQTPQAQQ KSLLQQLLTE
                               ===== ==========
HITS AT:   632-640, 689-696, 746-756, 1426-1440
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT
               2 REFERENCES IN FILE CA (1967 TO DATE)
               2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L16  ANSWER 19 OF 19  REGISTRY  COPYRIGHT 2000 ACS
RN   158163-19-0  REGISTRY
CN   L-Arginine, L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-glutaminyl-L-.alpha.-

aspartyl-L-threonyl-L-seryl-L-lysyl-L-asparaginyl-L-seryl-L-lysyl-L-leucyl-

L-asparaginyl-L-seryl-L-histidyl-L-glutaminyl-L-lysyl-L-valyl-L-threonyl-L-

leucyl-L-leucyl-L-glutaminyl-L-leucyl-L-leucyl-L-leucylglycyl-L-histidyl-L-

lysyl-L-asparaginyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-asparaginyl-L-
     valyl-L-.alpha.-glutamyl-L-lysyl-L-asparaginyl-L-threonyl-L-seryl-L-
     cysteinyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   Thyroid hormone receptor-binding protein S205a (human)
FS   PROTEIN SEQUENCE
SQL  39

SEQ      1 EDQDTSKNSK LNSHQKVTLL QLLLGHKNEE NVEKNTSCR
                           ==== =====
HITS AT:   17-25
MF   C186 H313 N59 O67 S
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXLIT, USPATFULL
               2 REFERENCES IN FILE CA (1967 TO DATE)
               2 REFERENCES IN FILE CAPLUS (1967 TO DATE)
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